

WHAT IS CLAIMED IS:

1. Cooling system for a farm machine, comprising a heat exchange assembly (1) designed to receive a cooling air flow (A) in a direction substantially perpendicular to one of its end surfaces, said assembly (1) comprising at least a first and a second radiator (2, 3, 4, 5) arranged close one to the other and so as to be passed through by said air flow (A), characterized in that hinging means (31-33; 43, 53-55) are associated to at least the first radiator (3, 4, 5), designed to enable the angular shift of the first radiator (3, 4, 5) with respect to the second radiator (2, 3, 4), between a respective operating position and a respective non-operating position.

2. System according to claim 1, characterized in that in said operating position the first radiator (3, 4, 5) is substantially parallel to the second radiator (2, 3, 4), and in that in said non-operating position the first radiator (3, 4, 5) is arranged angularly with respect to the second radiator (2, 3, 4).

3. System according to claim 1, characterized in that the hinging means (43) are designed to enable an angular forward shift of the first radiator (4) with respect to the second radiator (3).

4. System according to claim 1, characterized in that the hinging means comprise at least an articulation arm (43) angularly movable around a respective rotation axis.

5. System according to claim 4, characterized in that the arm (43) has an inner cavity belonging to a passage duct for a fluid passing within the first radiator (4).

6. System according to claim 5, characterized in that the arm (43) has a first area coupled in a stationary way with a lateral surface of the first radiator (4).

tor (4), and a second area coupled turnably with a support structure (81), said cavity having a first opening (44) on the first area, which is in fluid communication with the first radiator (4), and a second opening (45) on the second area, which is in fluid communication with a respective tube (47) of said fluid.

7. System according to claim 6, characterized in that the hinging means comprise two of said articulation arms (43), an arm (43) belonging to an inlet duct of said fluid into the first radiator (4) and the other arm (43) belonging to an outlet duct of said fluid from the first exchanger (4).

8. System according to claim 1, characterized in that a device (10A, 42A; 34, 34A; 43A, 43B, 43C, 56) is provided that can be switched between a blocking condition and a release condition, in its blocking condition said device (10A, 42A; 34, 34A; 43A, 43B, 43C, 56) keeping the first radiator (3, 4, 5) in its operating position, and in the release position said device (10A, 42A; 34, 34A; 43A, 43B, 43C, 56) enabling the shift of the radiator (3, 4, 5) to its non-operating position.

9. System according to claim 8, characterized in that actuating means (48) is provided designed to shift automatically the first radiator (4) from its operating position to its non-operating position as a result of the switching of said device (10A, 42A; 34, 34A; 43A, 43B, 43C, 56) to its respective release condition, said actuating means comprising in particular at least a gas spring (49).

10. System according to claim 1, characterized in that stopping means (34, 34A; 49) is provided, designed to limit the angular shift admitted for the first radiator (3, 4, 5).

11. System according to claim 1, characterized in that the hinging means (31-33; 53-55) are operatively

coupled with the lower portion of the first radiator (3, 5).

12. System according to claim 1, characterized in that also the second radiator (3, 5) is associated with
5 respective hinging means (31-33; 53-55), designed to enable the angular shift of the second radiator (3, 5) between a respective operating position and a respective non-operating position.

13. System according to claim 12, characterized
10 in that the second radiator (3) can be shifted angularly with respect to a further radiator (2) of said assembly (1), when the first radiator (4) is in its respective non-operating position.

14. System according to claim 1, characterized in
15 that said assembly (1) comprises at least a third radiator (5), to which respective hinging means (53-55) are associated, designed to enable the angular shift of the third radiator (5) between a respective operating position and a respective non-operating position.

20 15. System according to claim 14, characterized in that the third radiator (5) can be angularly shifted with respect to the first radiator (3).

16. System according to claim 15, characterized
25 in that the third radiator (5) is articulated to the first radiator (3) by means of its respective hinging means (53-55).

17. System according to claim 1, characterized in that the first radiator (4) belongs to an intercooler system.

30 18. System according to claim 1, characterized in that the second radiator is a radiator (2, 3) for cooling an oil or a motor.

19. System according to claim 13, characterized
35 in that the further radiator is a radiator for cooling an engine (2).

20. System according to claim 14, characterized in that the third radiator (3) is a radiator of an air conditioning system.

5 21. System according to claim 6, characterized in that said first area of the articulation arm (43) is coupled turnably with a respective wall (81) of a conveying element (8) in which operates a suction fan (9) inducing said air flow (A).

10 22. Farm machine, in particular a tractor, comprising a cooling system carried out according to claim 1.